## AMENDMENT TO THE CLAIMS

What is claimed:

- 1-9. (Canceled)
- 10. (Currently Amended) An apparatus comprising:

  a test block to determine a condition on a chip;

  an encoder to encode the condition to a first encoded condition; and

  a conversion circuit to convert the first encoded condition into an approximated second encoding; and
- a compensation circuit to adjust an on die termination circuit based on-a first encoded condition the approximated second encoding.
- 11. (Canceled)
- 12. (Original) The apparatus of claim 10, further comprising:

  a receiving circuit to receive an incoming signal, the receiving circuit to receive a third encoded condition and compensate the termination of the signal for the condition.
- 13. (Currently Amended) A system comprising:
  - a processor;
  - a first bus coupled to the processor;
  - a memory device;
  - a second bus coupled to the memory device; and
- a memory controller coupled to the first and second buses, the memory controller having a programmable on die termination circuit, a conversion circuit to convert a first encoded signal representing a condition in the memory into an approximated second encoding to program the on die termination circuit.
- 14. (Original) The system of claim 13, wherein the memory controller can receive data over the second bus at a rate between 200 and 400 megatranfers per second (MTS).

- 15. (Currently Amended) The system of claim 13, wherein the memory controller further comprises a-<u>the</u> testing circuit to determine a-<u>the</u> condition in the memory controller and generate an-<u>the first</u> encoded signal representing the condition, and wherein the encoded signal set the programmable on die termination circuit.
- 16. (Currently Amended) A method comprising:

  detecting a condition in a device;

  generating an encoded signal representing the condition;

  converting the encoded signal into a truncated condition code to program the on

  die termination circuit; and

  programming an on die termination circuit to compensate for the condition.
- 17. (Canceled)
- 18. (Original) The method of claim 16, further comprising: receiving an external signal at a rate of 200 to 400 mega transfers per second (MTS) at the on die termination circuit; and terminating the external signal.
- 19. (Currently Amended) A device comprising:

  means for detecting a condition in a device;

  means for generating an encoded signal based on the condition;

  means for converting the encoded signal into a truncated condition code to

  program the on die termination circuit; and

  means for programming an on die termination circuit based on the encoded signal.
- 20. (Canceled)
- 21. (Original) The device of claim 19, further comprising:
  means for receiving an external signal at a rate of 200 to 400 mega transfers per second (MTS) at the on die termination circuit; and
  means for terminating the external signal.

22-24. (Canceled)